

## ANALYTICAL REPORT

Prepared by

Lockheed Martin Information Systems and Global Services/Environmental Services  
Scientific, Engineering, Response and Analytical Services

Cabo Rojo Site  
Puerto Rico

March 2012

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X 032

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### TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air (SERAS SOP# 1814, EPA Method TO-15)

ERT/SERAS Laboratory  
2890 Woodbridge Avenue  
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for TO-15 analysis in air.





### Detailed Sample Information

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203001-24	0-130-1004
R203001-25	0-130-1005
R203001-26	0-130-1044
R203001-27	0-130-1045
R203001-28	0-130-1046
R203001-29	0-130-1049
R203001-30	0-130-1050
R203001-31	0-130-1054
R203001-32	0-130-1012
R203001-33	0-130-1013
R203001-34	0-130-1018
R203001-35	0-130-1019
R203001-36	0-130-1020
R203001-37	0-130-1021
R203001-38	0-130-1022
R203001-39	0-130-1055
R203001-40	0-130-1001
R203001-41	0-130-1002
R203001-42	0-130-1006
R203001-43	0-130-1007
R203001-44	0-130-1008
R203001-45	0-130-1033
R203001-46	0-130-1037
R203001-47	0-130-1039
R203001-48	0-130-1003
R203001-49	0-130-1041
R203001-50	0-130-1042
R203001-51	0-130-1043
R203001-52	0-130-1047
R203001-53	0-130-1048
R203001-54	0-130-1051
R203001-55	0-130-1052
R203001-56	0-130-1053
R203001-57	0-130-1057

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#### REPORT OF LABORATORY ANALYSIS

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## Introduction

SERAS personnel, in response to WA# SERAS-130, provided analytical support for environmental samples collected from the Cabo Rojo Site in Puerto Rico, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/Method	Laboratory	Data Package
0-130-3/1/12-0009	8	03/01/12	03/05/12	03/05/12 through 03/07/12	Air	TO-15(VOC) SERAS SOP 1814	ERT/SERAS	X 032
0-130-3/1/12-0010	1				Soil Gas			
	7							
0-130-3/2/12-0011	8							
0-130-3/2/12-0012	8							
0-130-3/2/12-0013	1	03/02/12			Trip Blank			
	1							

## Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

### TO-15 (VOC) in Air Package X 032

Isopropyl alcohol was detected above the reporting limit (RL) in the canisters used to collect samples 0-130-1020 and 0-130-1039 during the SUMMA certification process. The isopropyl alcohol result for these samples are qualified estimated (J) because the results are less than five times the certification result. The RLs were raised to the certification result value; therefore, the results may be biased high.

Isopropyl alcohol did not meet the %RSD criterion for the initial calibration of 9/22/11. Isopropyl alcohol is qualified estimated (J) for sample 0-130-1019.

The low point(s) of the initial calibration were not used to generate the initial calibration curve for acetone and isopropyl alcohol. The RLs are based on the 100 ppt standard for acetone and 500 ppt standard for isopropyl alcohol for samples 0-130-1012, 0-130-1013, 0-130-1018 through 0-130-1022, 0-130-1033, 0-130-1037 and 0-130-1039.

The trip blank contained acetone above the RL. The acetone results for samples 0-130-1012 and 0-130-1021 were qualified non-detect "U" and the RLs were raised to the levels found in the samples.

*The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.*

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## Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m <sup>3</sup>	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

## Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09



Table 1.1a Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.		R203001-24		R203001-25		R203001-26		R203001-27
Sample Number	3/5/2012	0-130-1004		0-130-1005		0-130-1044		0-130-1045
Sample Location	Method Blank	S2A-IA1		S2A-IA2		DEC-IA1		DEC-IA2
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	0.0775	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	0.388	0.0698	U	0.0698	U	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-28	R203001-29	R203001-30	R203001-31	R203001-39			
Sample Number	0-130-1046	0-130-1049	0-130-1050	0-130-1054	0-130-1055			
Sample Location	DEC-AMB1	DEC-IA3	CRPDC-IA1	CRPDC-IA2	CRPDC-AMB1			
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	0.933	0.0698	0.614	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698	0.998	0.0698	0.715	0.0698
							1.18	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-40	R203001-41	R203001-42	R203001-43	R203001-44			
Sample Number	0-130-1001	0-130-1002	0-130-1006	0-130-1007	0-130-1008			
Sample Location	S2A-SS2	S2A-SS3	S2B-SS1	S2B-SS2	S2B-SS3			
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	0.294	0.0698	7.38	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	48.9	0.0698	849	1.50	3.14	0.0698	2.65	0.0698
							3.92	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-48	8R203001-49	8R203001-50	8R203001-51	8R203001-52
Sample Number	0-130-1003	0-130-1041	0-130-1042	0-130-1043	0-130-1047
Sample Location	S2A-SS4	DEC-SS3	DEC-SS4	DEC-SS5	DEC-SS1

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698	U	0.0698	0.0842	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	0.907	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	147	1.50	0.337	0.0698	0.167	0.0698	U	0.0698	7.16	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	8R203001-53	8R203001-54	8R203001-55	8R203001-56
Sample Number	0-130-1048	0-130-1051	0-130-1052	0-130-1053
Sample Location	DEC-SS2	CRPDC-SS3	CRPDC-SS1	CRPDC-SS2

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	1.50	U	1.50	U	1.50
1,1-Dichloroethene	U	0.0698	U	1.50	U	1.50	U	1.50
trans-1,2-Dichloroethene	U	0.0698	U	1.50	U	1.50	U	1.50
1,1-Dichloroethane	U	0.0698	U	1.50	U	1.50	U	1.50
cis-1,2-Dichloroethene	U	0.0698	U	1.50	U	1.50	U	1.50
1,2-Dichloroethane	U	0.0698	U	1.50	U	1.50	U	1.50
Trichloroethene	0.309	0.0698	10.6	1.50	29.0	1.50	17.6	1.50
Tetrachloroethene	27.5	0.0698	36700	113	102000	225	15400	113

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-57			
Sample Number	3/5/2012		0-130-1057	
Sample Location	Method Blank		Trip Blank	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Propylene	U	0.0698	U	0.0698
Dichlorodifluoromethane	U	0.0698	U	0.0698
Chloromethane	U	0.0698	U	0.0698
Dichlortetrafluoroethane	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698
Acetone	0.0997	0.233	0.364	0.233
Trichlorofluoromethane	U	0.0698	U	0.0698
Isopropyl Alcohol	U	1.165	U	1.165
1,1-Dichloroethene	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	U	0.0698
Trichlorotrifluoroethane	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698
Vinyl Acetate	U	0.0698	U	0.0698
2-Butanone	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698
Ethyl Acetate	U	0.0698	U	0.0698
Hexane	U	0.0698	U	0.0698
Chloroform	U	0.0698	U	0.0698
Tetrahydrofuran	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
1,1,1-Trichloroethane	U	0.0698	U	0.0698
Benzene	U	0.0698	U	0.0698
Carbon Tetrachloride	U	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698
Heptane	U	0.0698	U	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	U	0.0698	U	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698
Toluene	U	0.0698	U	0.0698
2-Hexanone	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698
Chlorobenzene	U	0.0698	U	0.0698
Ethylbenzene	U	0.0698	U	0.0698
m&p-Xylene	U	0.0698	U	0.0698
Bromoform	U	0.0698	U	0.0698
Styrene	U	0.0698	U	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698	U	0.0698
o-Xylene	U	0.0698	U	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	U	0.0698	U	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698
1,4-Dichlorobenzene	U	0.0698	U	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

Analyte	SERAS Sample No.		8R203001-32		8R203001-33		8R203001-34		8R203001-35	
	Sample Number	3/6/2012	0-130-1012		0-130-1013		0-130-1018		0-130-1019	
			Method Blank		EQP-SS1		EQP-SS2		EQP-SS3	
Results	ppbv	RL	Results	RL	Results	RL	Results	RL	Results	RL
Propylene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Dichlorodifluoromethane	U	0.0698	0.338	0.0698	0.351	0.0698	0.384	0.0698	0.498	0.0698
Chloromethane	U	0.0698	0.145	0.0698	0.115	0.0698	0.135	0.0698	0.135	0.0698
Dichlortetrafluoroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Acetone	U	0.233	U	2.60	4.65	0.233	13.4	0.233	6.94	0.233
Trichlorofluoromethane	U	0.0698	0.204	0.0698	0.464	0.0698	0.351	0.0698	1.83	0.0698
Isopropyl Alcohol	U	1.16	0.760	1.16	1.08	1.16	0.816	1.16	17.8	J 1.16
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.156	0.0698
Methylene Chloride	U	0.0698	0.190	0.0698	0.603	0.0698	0.262	0.0698	U	0.0698
Trichlorotrifluoroethane	U	0.0698	0.0759	0.0698	U	0.0698	0.0706	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.253	0.0698	0.0732	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Vinyl Acetate	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
2-Butanone	U	0.0698	0.814	0.0698	1.51	0.0698	1.40	0.0698	0.707	0.0698
cis-1,2-Dichloroethene	U	0.0698	0.0757	0.0698	U	0.0698	0.0984	0.0698	4.50	0.0698
Ethyl Acetate	U	0.0698	0.430	0.0698	0.524	0.0698	0.529	0.0698	0.353	0.0698
Hexane	U	0.0698	0.0919	0.0698	0.219	0.0698	0.424	0.0698	0.216	0.0698
Chloroform	U	0.0698	0.446	0.0698	0.146	0.0698	1.78	0.0698	U	0.0698
Tetrahydrofuran	U	0.0698	0.113	0.0698	0.172	0.0698	U	0.0698	0.199	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,1-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.197	0.0698
Benzene	U	0.0698	0.0930	0.0698	U	0.0698	0.190	0.0698	U	0.0698
Carbon Tetrachloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	19.5	0.0698	0.0893	0.0698	0.0843	0.0698	1.7	0.0698
Heptane	U	0.0698	U	0.0698	U	0.0698	0.0845	0.0698	U	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	U	0.0698	0.336	0.0698	0.082	0.0698	0.543	0.0698	0.791	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Toluene	U	0.0698	0.858	0.0698	0.854	0.0698	1.07	0.0698	0.478	0.0698
2-Hexanone	U	0.0698	U	0.0698	0.08	0.0698	0.0804	0.0698	U	0.0698
Dibromochloromethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	1080	1.50	319	1.50	265	1.50	383	1.50
Chlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Ethylbenzene	U	0.0698	U	0.0698	U	0.0698	0.106	0.0698	U	0.0698
m&p-Xylene	U	0.0698	U	0.0698	0.121	0.0698	0.274	0.0698	U	0.0698
Bromoform	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Styrene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,2-Tetrachloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
o-Xylene	U	0.0698	U	0.0698	0.128	0.0698	0.283	0.0698	U	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	U	0.0698	U	0.0698	0.089	0.0698	0.183	0.0698	U	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,4-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	0.0811	0.0698	U	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-36		8R203001-37		8R203001-38		8R203001-45		8R203001-46	
Sample Number	0-130-1020		0-130-1021		0-130-1022		0-130-1033		0-130-1037	
Sample Location	EQP-SS5		EQP-SS6		EQP-SS7		EQP-SS8		EQP-SS9	
Analyte	Results ppbv	RL ppbv								
Propylene	U	0.0698								
Dichlorodifluoromethane	0.479	0.0698	0.369	0.0698	0.348	0.0698	0.221	0.0698	0.406	0.0698
Chloromethane	0.114	0.0698	U	0.0698	0.251	0.0698	U	0.0698	0.661	0.0698
Dichlortetrafluoroethane	U	0.0698								
Vinyl Chloride	U	0.0698								
1,3-Butadiene	U	0.0698								
Bromomethane	U	0.0698								
Chloroethane	U	0.0698								
Acetone	8.46	0.233	U	3.63	8.44	0.233	4.92	0.233	6080	1000
Trichlorofluoromethane	1.42	0.0698	0.554	0.0698	0.240	0.0698	0.205	0.0698	0.240	0.0698
Isopropyl Alcohol	3.45	J 2.20	0.371	1.16	0.827	1.16	U	1.16	U	1.16
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	0.188	0.0698	U	0.0698	U	0.0698	1.50	0.0698	29.6	0.0698
Trichlorotrifluoroethane	0.0784	0.0698	0.0725	0.0698	0.0756	0.0698	0.0734	0.0698	0.0749	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	3.41	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698								
MTBE	U	0.0698								
Vinyl Acetate	U	0.0698								
2-Butanone	1.47	0.0698	0.873	0.0698	1.43	0.0698	0.941	0.0698	11.0	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	94.5	1.50	U	0.0698
Ethyl Acetate	0.628	0.0698	0.508	0.0698	0.487	0.0698	0.546	0.0698	U	0.0698
Hexane	0.343	0.0698	0.371	0.0698	0.257	0.0698	0.388	0.0698	11.9	0.0698
Chloroform	0.0916	0.0698	0.104	0.0698	0.160	0.0698	3.97	0.0698	0.334	0.0698
Tetrahydrofuran	0.192	0.0698	0.464	0.0698	0.252	0.0698	0.308	0.0698	16.8	0.0698
1,2-Dichloroethane	U	0.0698								
1,1,1-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	0.117	0.0698	U	0.0698
Benzene	0.119	0.0698	U	0.0698	U	0.0698	1.04	0.0698	0.392	0.0698
Carbon Tetrachloride	U	0.0698								
Cyclohexane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.324	0.0698
1,2-Dichloropropane	U	0.0698								
1,4-Dioxane	U	0.0698								
Trichloroethene	U	0.0698	0.157	0.0698	1.75	0.0698	627	1.50	0.122	0.0698
Heptane	U	0.0698								
cis-1,3-Dichloropropene	U	0.0698								
Methyl Isobutyl Ketone	0.176	0.0698	0.259	0.0698	0.509	0.0698	1.29	0.0698	5.27	0.0698
trans-1,3-Dichloropropene	U	0.0698								
1,1,2-Trichloroethane	U	0.0698								
Toluene	1.31	0.0698	0.643	0.0698	0.617	0.0698	0.865	0.0698	228	1.50
2-Hexanone	0.133	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698								
1,2-Dibromoethane	U	0.0698								
Tetrachloroethene	110	1.50	841	1.50	539	1.50	111000	300	82.8	1.50
Chlorobenzene	U	0.0698								
Ethylbenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.897	0.0698
m&p-Xylene	0.206	0.0698	0.102	0.0698	U	0.0698	0.116	0.0698	3.82	0.0698
Bromoform	U	0.0698								
Styrene	U	0.0698	0.0912	0.0698	U	0.0698	U	0.0698	0.123	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698								
o-Xylene	0.134	0.0698	0.0867	0.0698	U	0.0698	U	0.0698	2.28	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	12.6	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	9.70	0.0698
1,2,4-Trimethylbenzene	0.0988	0.0698	U	0.0698	U	0.0698	0.122	0.0698	26.5	0.0698
1,3-Dichlorobenzene	U	0.0698								
1,4-Dichlorobenzene	U	0.0698								
1,2-Dichlorobenzene	U	0.0698								

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Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No. 8R203001-47  
 Sample Number 0-130-1039  
 Sample Location EQP-SS10

Analyte	Results ppbv	RL ppbv
Propylene	U	0.0698
Dichlorodifluoromethane	0.358	0.0698
Chloromethane	0.673	0.0698
Dichlortetrafluoroethane	U	0.0698
Vinyl Chloride	U	0.0698
1,3-Butadiene	U	0.0698
Bromomethane	U	0.0698
Chloroethane	U	0.0698
Acetone	461	5.00
Trichlorofluoromethane	0.208	0.0698
Isopropyl Alcohol	5.94 J	2.87
1,1-Dichloroethene	U	0.0698
Methylene Chloride	4.85	0.0698
Trichlorotrifluoroethane	0.0791	0.0698
trans-1,2-Dichloroethene	U	0.0698
1,1-Dichloroethane	U	0.0698
MTBE	U	0.0698
Vinyl Acetate	U	0.0698
2-Butanone	15.6	0.0698
cis-1,2-Dichloroethene	U	0.0698
Ethyl Acetate	5.19	0.0698
Hexane	9.05	0.0698
Chloroform	1.80	0.0698
Tetrahydrofuran	1.90	0.0698
1,2-Dichloroethane	0.257	0.0698
1,1,1-Trichloroethane	U	0.0698
Benzene	4.69	0.0698
Carbon Tetrachloride	0.147	0.0698
Cyclohexane	1.91	0.0698
1,2-Dichloropropane	0.229	0.0698
1,4-Dioxane	U	0.0698
Trichloroethene	U	0.0698
Heptane	4.31	0.0698
cis-1,3-Dichloropropene	U	0.0698
Methyl Isobutyl Ketone	U	0.0698
trans-1,3-Dichloropropene	U	0.0698
1,1,2-Trichloroethane	U	0.0698
Toluene	34700	300
2-Hexanone	U	0.0698
Dibromochloromethane	U	0.0698
1,2-Dibromoethane	U	0.0698
Tetrachloroethene	4.92	0.0698
Chlorobenzene	U	0.0698
Ethylbenzene	12.5	0.0698
m&p-Xylene	30.6	0.0698
Bromoform	U	0.0698
Styrene	0.589	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698
o-Xylene	6.89	0.0698
p-Ethyltoluene	2.44	0.0698
1,3,5-Trimethylbenzene	1.79	0.0698
1,2,4-Trimethylbenzene	5.65	0.0698
1,3-Dichlorobenzene	U	0.0698
1,4-Dichlorobenzene	0.257	0.0698
1,2-Dichlorobenzene	U	0.0698

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Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	R203001-24	R203001-25	R203001-26	R203001-27						
Sample Number	0-130-1004	0-130-1005	0-130-1044	0-130-1045						
Sample Location	Method Blank	S2A-IA1	S2A-IA2	DEC-IA1						
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277	U	0.277	0.307	0.277	U	0.277	U	0.277
1,2-Dichloroethane	U	0.282								
Trichloroethene	U	0.375								
Tetrachloroethene	U	0.473	2.63	0.473	U	0.473	U	0.473	U	0.473

Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-28	R203001-29	R203001-30	R203001-31	R203001-39					
Sample Number	0-130-1046	0-130-1049	0-130-1050	0-130-1054	0-130-1055					
Sample Location	DEC-AMB1	DEC-IA3	CRPDC-IA1	CRPDC-IA2	CRPDC-AMB1					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282	3.78	0.282	2.48	0.282	U	0.282	U	0.282
Trichloroethene	U	0.375								
Tetrachloroethene	U	0.473	U	0.473	6.77	0.473	4.85	0.473	7.99	0.473

Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-40	R203001-41	R203001-42	R203001-43	R203001-44					
Sample Number	0-130-1001	0-130-1002	0-130-1006	0-130-1007	0-130-1008					
Sample Location	S2A-SS2	S2A-SS3	S2B-SS1	S2B-SS2	S2B-SS3					
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	1.58	0.375	39.7	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethene	332	0.473	5760	10.2	21.3	0.473	18.0	0.473	26.6	0.473

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Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-48	8R203001-49	8R203001-50	8R203001-51	8R203001-52
Sample Number	0-130-1003	0-130-1041	0-130-1042	0-130-1043	0-130-1047
Sample Location	S2A-SS4	DEC-SS3	DEC-SS4	DEC-SS5	DEC-SS1

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277	U	0.277	0.334	0.277	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	4.88	0.375	U	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethene	998	10.2	2.29	0.473	1.13	0.473	U	0.473	48.6	0.473

Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	8R203001-53	8R203001-54	8R203001-55	8R203001-56
Sample Number	0-130-1048	0-130-1051	0-130-1052	0-130-1053
Sample Location	DEC-SS2	CRPDC-SS3	CRPDC-SS1	CRPDC-SS2

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	3.83	U	3.83	U	3.83
1,1-Dichloroethene	U	0.277	U	5.95	U	5.95	U	5.95
trans-1,2-Dichloroethene	U	0.277	U	5.95	U	5.95	U	5.95
1,1-Dichloroethane	U	0.282	U	6.07	U	6.07	U	6.07
cis-1,2-Dichloroethene	U	0.277	U	5.95	U	5.95	U	5.95
1,2-Dichloroethane	U	0.282	U	6.07	U	6.07	U	6.07
Trichloroethene	1.66	0.375	57.1	8.06	156	8.06	94.6	8.06
Tetrachloroethene	187	0.473	249000	766	692000	1530	104000	766

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Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.			8R203001-57	
Sample Number	3/5/2012		0-130-1057	
Sample Location	Method Blank		Trip Blank	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120
Dichlorodifluoromethane	U	0.345	U	0.345
Chloromethane	U	0.144	U	0.144
Dichlorotetrafluoroethane	U	0.488	U	0.488
Vinyl Chloride	U	0.178	U	0.178
1,3-Butadiene	U	0.154	U	0.154
Bromomethane	U	0.271	U	0.271
Chloroethane	U	0.184	U	0.184
Acetone	0.237	0.552	0.864	0.552
Trichlorofluoromethane	U	0.392	U	0.392
Isopropyl Alcohol	U	2.860	U	2.860
1,1-Dichloroethene	U	0.277	U	0.277
Methylene Chloride	U	0.242	U	0.242
Trichlorotrifluoroethane	U	0.535	U	0.535
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
MTBE	U	0.252	U	0.252
Vinyl Acetate	U	0.246	U	0.246
2-Butanone	U	0.206	U	0.206
cis-1,2-Dichloroethene	U	0.277	U	0.277
Ethyl Acetate	U	0.251	U	0.251
Hexane	U	0.246	U	0.246
Chloroform	U	0.341	U	0.341
Tetrahydrofuran	U	0.206	U	0.206
1,2-Dichloroethane	U	0.282	U	0.282
1,1,1-Trichloroethane	U	0.381	U	0.381
Benzene	U	0.223	U	0.223
Carbon Tetrachloride	U	0.439	U	0.439
Cyclohexane	U	0.240	U	0.240
1,2-Dichloropropane	U	0.322	U	0.322
1,4-Dioxane	U	0.251	U	0.251
Trichloroethene	U	0.375	U	0.375
Heptane	U	0.286	U	0.286
cis-1,3-Dichloropropene	U	0.317	U	0.317
Methyl Isobutyl Ketone	U	0.286	U	0.286
trans-1,3-Dichloropropene	U	0.317	U	0.317
1,1,2-Trichloroethane	U	0.381	U	0.381
Toluene	U	0.263	U	0.263
2-Hexanone	U	0.286	U	0.286
Dibromochloromethane	U	0.594	U	0.594
1,2-Dibromoethane	U	0.536	U	0.536
Tetrachloroethene	U	0.473	U	0.473
Chlorobenzene	U	0.321	U	0.321
Ethylbenzene	U	0.303	U	0.303
m&p-Xylene	U	0.303	U	0.303
Bromoform	U	0.721	U	0.721
Styrene	U	0.297	U	0.297
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479
o-Xylene	U	0.303	U	0.303
p-Ethyltoluene	U	0.343	U	0.343
1,3,5-Trimethylbenzene	U	0.343	U	0.343
1,2,4-Trimethylbenzene	U	0.343	U	0.343
1,3-Dichlorobenzene	U	0.419	U	0.419
1,4-Dichlorobenzene	U	0.419	U	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419

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Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	3/6/2012		8R203001-32		8R203001-33		8R203001-34		8R203001-35	
Sample Number	Method Blank		0-130-1012		0-130-1013		0-130-1018		0-130-1019	
Sample Location			EQP-SS1		EQP-SS2		EQP-SS3		EQP-SS4	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Propylene	U	0.120								
Dichlorodifluoromethane	U	0.345	1.67	0.345	1.73	0.345	1.90	0.345	2.46	0.345
Chloromethane	U	0.144	0.300	0.144	0.238	0.144	0.279	0.144	0.279	0.144
Dichlorotetrafluoroethane	U	0.488								
Vinyl Chloride	U	0.178								
1,3-Butadiene	U	0.154								
Bromomethane	U	0.271								
Chloroethane	U	0.184								
Acetone	U	0.552	U	6.170	11.1	0.552	31.9	0.552	16.5	0.552
Trichlorofluoromethane	U	0.392	1.14	0.392	2.61	0.392	1.97	0.392	10.3	0.392
Isopropyl Alcohol	U	2.86	1.87	2.86	2.65	0.572	2.00	0.572	43.6	J 0.572
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	0.618	0.277
Methylene Chloride	U	0.242	0.660	0.242	2.10	0.242	0.911	0.242	U	0.242
Trichlorotrifluoroethane	U	0.535	0.582	0.535	U	0.535	0.541	0.535	U	0.535
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	1.00	0.277	0.290	0.277
1,1-Dichloroethane	U	0.282								
MTBE	U	0.252								
Vinyl Acetate	U	0.246								
2-Butanone	U	0.206	2.40	0.206	4.44	0.206	4.12	0.206	2.09	0.206
cis-1,2-Dichloroethene	U	0.277	0.300	0.277	U	0.277	0.390	0.277	17.8	0.277
Ethyl Acetate	U	0.251	1.55	0.251	1.89	0.251	1.91	0.251	1.27	0.251
Hexane	U	0.246	0.324	0.246	0.770	0.246	1.50	0.246	0.763	0.246
Chloroform	U	0.341	2.18	0.341	0.711	0.341	8.69	0.341	U	0.341
Tetrahydrofuran	U	0.206	0.333	0.206	0.506	0.206	U	0.206	0.588	0.206
1,2-Dichloroethane	U	0.282								
1,1,1-Trichloroethane	U	0.381	U	0.381	U	0.381	U	0.381	1.07	0.381
Benzene	U	0.223	0.297	0.223	U	0.223	0.607	0.223	U	0.223
Carbon Tetrachloride	U	0.439								
Cyclohexane	U	0.240								
1,2-Dichloropropane	U	0.322								
1,4-Dioxane	U	0.251								
Trichloroethene	U	0.375	105	0.375	0.480	0.375	0.453	0.375	9.13	0.375
Heptane	U	0.286								
cis-1,3-Dichloropropene	U	0.317								
Methyl Isobutyl Ketone	U	0.286	1.38	0.286	0.335	0.286	2.23	0.286	3.24	0.286
trans-1,3-Dichloropropene	U	0.317								
1,1,2-Trichloroethane	U	0.381								
Toluene	U	0.263	3.23	0.263	3.22	0.263	4.04	0.263	1.80	0.263
2-Hexanone	U	0.286	U	0.286	0.328	0.286	0.329	0.286	U	0.286
Dibromochloromethane	U	0.594								
1,2-Dibromoethane	U	0.536								
Tetrachloroethene	U	0.473	7340	10.2	2170	10.2	1790	10.2	2600	10.2
Chlorobenzene	U	0.321								
Ethylbenzene	U	0.303	U	0.303	U	0.303	0.461	0.303	U	0.303
m&p-Xylene	U	0.303	U	0.303	0.528	0.303	1.19	0.303	U	0.303
Bromoform	U	0.721								
Styrene	U	0.297								
1,1,2,2-Tetrachloroethane	U	0.479								
o-Xylene	U	0.303	U	0.303	0.556	0.303	1.23	0.303	U	0.303
p-Ethyltoluene	U	0.343								
1,3,5-Trimethylbenzene	U	0.343								
1,2,4-Trimethylbenzene	U	0.343	U	0.343	0.437	0.343	0.899	0.343	U	0.343
1,3-Dichlorobenzene	U	0.419								
1,4-Dichlorobenzene	U	0.419	U	0.419	U	0.419	0.488	0.419	U	0.419
1,2-Dichlorobenzene	U	0.419								

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Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-36	8R203001-37	8R203001-38	8R203001-45	8R203001-46
Sample Number	0-130-1020	0-130-1021	0-130-1022	0-130-1033	0-130-1037
Sample Location	EQP-SS5	EQP-SS6	EQP-SS7	EQP-SS8	EQP-SS9
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120	U
Dichlorodifluoromethane	2.37	0.345	1.82	0.345	1.09
Chloromethane	0.235	0.144	U	0.144	U
Dichlorotetrafluoroethane	U	0.488	U	0.488	U
Vinyl Chloride	U	0.178	U	0.178	U
1,3-Butadiene	U	0.154	U	0.154	U
Bromomethane	U	0.271	U	0.271	U
Chloroethane	U	0.184	U	0.184	U
Acetone	20.1	0.552	U	8.63	20.1
Trichlorofluoromethane	7.97	0.392	3.11	0.392	1.15
Isopropyl Alcohol	8.48	J 5.41	0.911	2.86	2.03
1,1-Dichloroethene	U	0.277	U	0.277	U
Methylene Chloride	0.653	0.242	U	0.242	U
Trichlorotrifluoroethane	0.601	0.535	0.555	0.535	0.579
trans-1,2-Dichloroethene	U	0.277	U	0.277	U
1,1-Dichloroethane	U	0.282	U	0.282	U
MTBE	U	0.252	U	0.252	U
Vinyl Acetate	U	0.246	U	0.246	U
2-Butanone	4.33	0.206	2.57	0.206	4.23
cis-1,2-Dichloroethene	U	0.277	U	0.277	U
Ethyl Acetate	2.26	0.251	1.83	0.251	1.76
Hexane	1.21	0.246	1.31	0.246	0.905
Chloroform	0.447	0.341	0.508	0.341	0.780
Tetrahydrofuran	0.566	0.206	1.37	0.206	0.743
1,2-Dichloroethane	U	0.282	U	0.282	U
1,1,1-Trichloroethane	U	0.381	U	0.381	U
Benzene	0.379	0.223	U	0.223	U
Carbon Tetrachloride	U	0.439	U	0.439	U
Cyclohexane	U	0.240	U	0.240	U
1,2-Dichloropropane	U	0.322	U	0.322	U
1,4-Dioxane	U	0.251	U	0.251	U
Trichloroethene	U	0.375	0.843	0.375	9.41
Heptane	U	0.286	U	0.286	0.375
cis-1,3-Dichloropropene	U	0.317	U	0.317	U
Methyl Isobutyl Ketone	0.721	0.286	1.06	0.286	2.08
trans-1,3-Dichloropropene	U	0.317	U	0.317	U
1,1,2-Trichloroethane	U	0.381	U	0.381	U
Toluene	4.93	0.263	2.42	0.263	2.33
2-Hexanone	0.546	0.286	U	0.286	0.263
Dibromochloromethane	U	0.594	U	0.594	U
1,2-Dibromoethane	U	0.536	U	0.536	U
Tetrachloroethene	748	10.2	5710	10.2	3650
Chlorobenzene	U	0.321	U	0.321	10.2
Ethylbenzene	U	0.303	U	0.303	0.286
m&p-Xylene	0.896	0.303	0.443	0.303	U
Bromoform	U	0.721	U	0.721	0.303
Styrene	U	0.297	0.389	0.297	U
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479	0.297
o-Xylene	0.581	0.303	0.376	0.303	U
p-Ethyltoluene	U	0.343	U	0.343	0.297
1,3,5-Trimethylbenzene	U	0.343	U	0.343	U
1,2,4-Trimethylbenzene	0.486	0.343	U	0.343	0.479
1,3-Dichlorobenzene	U	0.419	U	0.419	0.479
1,4-Dichlorobenzene	U	0.419	U	0.419	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419	U

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Table 1.1b Results of the Analysis for VOC ( $\mu\text{g}/\text{m}^3$ ) in Air  
 WA# SERAS-130 Cabo Rojo Site

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Method SERAS SOP#1814

SERAS Sample No.	8R203001-47
Sample Number	0-130-1039
Sample Location	EQP-SS10

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Propylene	U	0.120
Dichlorodifluoromethane	1.77	0.345
Chloromethane	1.39	0.144
Dichlorotetrafluoroethane	U	0.488
Vinyl Chloride	U	0.178
1,3-Butadiene	U	0.154
Bromomethane	U	0.271
Chloroethane	U	0.184
Acetone	1100	11.9
Trichlorofluoromethane	1.17	0.392
Isopropyl Alcohol	14.6 J	7.05
1,1-Dichloroethene	U	0.277
Methylene Chloride	16.9	0.242
Trichlorotrifluoroethane	0.606	0.535
trans-1,2-Dichloroethene	U	0.277
1,1-Dichloroethane	U	0.282
MTBE	U	0.252
Vinyl Acetate	U	0.246
2-Butanone	46.0	0.206
cis-1,2-Dichloroethene	U	0.277
Ethyl Acetate	18.7	0.251
Hexane	31.9	0.246
Chloroform	8.78	0.341
Tetrahydrofuran	5.59	0.206
1,2-Dichloroethane	1.04	0.282
1,1,1-Trichloroethane	U	0.381
Benzene	15.0	0.223
Carbon Tetrachloride	0.924	0.439
Cyclohexane	6.58	0.240
1,2-Dichloropropane	1.06	0.322
1,4-Dioxane	U	0.251
Trichloroethene	U	0.375
Heptane	17.7	0.286
cis-1,3-Dichloropropene	U	0.317
Methyl Isobutyl Ketone	U	0.286
trans-1,3-Dichloropropene	U	0.317
1,1,2-Trichloroethane	U	0.381
Toluene	131000	1130
2-Hexanone	U	0.286
Dibromochloromethane	U	0.594
1,2-Dibromoethane	U	0.536
Tetrachloroethene	33.4	0.473
Chlorobenzene	U	0.321
Ethylbenzene	54.2	0.303
m&p-Xylene	133	0.303
Bromoform	U	0.721
Styrene	2.51	0.297
1,1,2,2-Tetrachloroethane	U	0.479
o-Xylene	29.9	0.303
p-Ethyltoluene	12.0	0.343
1,3,5-Trimethylbenzene	8.79	0.343
1,2,4-Trimethylbenzene	27.8	0.343
1,3-Dichlorobenzene	U	0.419
1,4-Dichlorobenzene	1.55	0.419
1,2-Dichlorobenzene	U	0.419

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Table 2.1 Results of the LCS Analysis for VOC in Air  
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 3

Sample ID: LCS 03/05/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.872	84.7	31 - 133
Dichlorodifluoromethane	1.05	0.798	76.0	58 - 140
Chloromethane	1.03	0.838	81.4	52 - 134
Dichlorotetrafluoroethane	1.03	0.891	86.5	54 - 136
Vinyl Chloride	1.03	0.822	79.8	53 - 130
1,3-Butadiene	1.04	0.712	68.5	33 - 130
Bromomethane	1.05	0.891	84.9	41 - 140
Chloroethane	1.05	0.800	76.2	44 - 139
Acetone	0.997	0.777	77.9	35 - 151
Trichlorofluoromethane	1.06	0.910	85.8	50 - 148
Isopropyl Alcohol	1.07	0.543	50.7	19 - 166
1,1-Dichloroethene	1.05	0.835	79.5	49 - 128
Methylene Chloride	1.05	0.826	78.7	35 - 134
Trichlorotrifluoroethane	1.05	1.07	102	40 - 160
trans-1,2-Dichloroethene	1.05	0.821	78.2	62 - 123
1,1-Dichloroethane	1.05	0.871	83.0	64 - 133
MTBE	1.05	0.847	80.7	56 - 130
Vinyl Acetate	1.06	0.735	69.3	65 - 117
2-Butanone	1.03	0.877	85.1	38 - 157
cis-1,2-Dichloroethene	1.05	0.864	82.3	61 - 129
Ethyl Acetate	1.02	0.868	85.1	54 - 158
Hexane	1.04	0.850	81.7	67 - 121
Chloroform	1.02	0.922	90.4	62 - 141
Tetrahydrofuran	1.06	0.742	70.0	46 - 119
1,2-Dichloroethane	1.05	0.885	84.3	59 - 139
1,1,1-Trichloroethane	1.05	0.775	73.8	53 - 160
Benzene	1.05	0.713	67.9	62 - 123
Carbon Tetrachloride	1.04	0.816	78.5	56 - 159
Cyclohexane	1.05	0.778	74.1	59 - 133
1,2-Dichloropropane	1.05	0.750	71.4	51 - 149
1,4-Dioxane	1.04	0.695	66.8	10 - 170
Trichloroethene	1.04	0.868	83.5	72 - 133
Heptane	1.03	0.747	72.5	35 - 172
cis-1,3-Dichloropropene	1.08	0.806	74.6	66 - 156
Methyl Isobutyl Ketone	1.02	0.692	67.8	10 - 200
trans-1,3-Dichloropropene	1.06	0.737	69.5	52 - 158
1,1,2-Trichloroethane	1.03	0.834	81.0	62 - 143
Toluene	1.05	0.791	75.3	64 - 133
2-Hexanone	1.07	0.657	61.4	10 - 200
Dibromochloromethane	1.06	0.872	82.3	64 - 151
1,2-Dibromoethane	1.04	0.832	80.0	65 - 143
Tetrachloroethene	1.04	0.865	83.2	66 - 138
Chlorobenzene	1.06	0.831	78.4	62 - 134
Ethylbenzene	1.06	0.826	77.9	61 - 139
m&p-Xylene	2.07	1.56	75.4	14 - 175
Bromoform	1.03	0.887	86.1	68 - 142
Styrene	1.05	0.827	78.8	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.742	73.5	43 - 156
o-Xylene	1.06	0.832	78.5	53 - 150
p-Ethyltoluene	1.06	0.871	82.2	59 - 129
1,3,5-Trimethylbenzene	1.06	0.831	78.4	39 - 125
1,2,4-Trimethylbenzene	1.04	0.847	81.4	24 - 131
1,3-Dichlorobenzene	1.03	0.924	89.7	57 - 124
1,4-Dichlorobenzene	1.03	0.920	89.3	56 - 128
1,2-Dichlorobenzene	1.05	0.926	88.2	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air  
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/06/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.882	85.6	31 - 133
Dichlorodifluoromethane	1.05	0.815	77.6	58 - 140
Chloromethane	1.03	0.851	82.6	52 - 134
Dichlorotetrafluoroethane	1.03	0.912	88.5	54 - 136
Vinyl Chloride	1.03	0.860	83.5	53 - 130
1,3-Butadiene	1.04	0.738	71.0	33 - 130
Bromomethane	1.05	0.951	90.6	41 - 140
Chloroethane	1.05	0.836	79.6	44 - 139
Acetone	0.997	0.780	78.2	35 - 151
Trichlorofluoromethane	1.06	0.956	90.2	50 - 148
Isopropyl Alcohol	1.07	0.558	52.1	19 - 166
1,1-Dichloroethene	1.05	0.841	80.1	49 - 128
Methylene Chloride	1.05	0.862	82.1	35 - 134
Trichlorotrifluoroethane	1.05	1.10	105	40 - 160
trans-1,2-Dichloroethene	1.05	0.832	79.2	62 - 123
1,1-Dichloroethane	1.05	0.890	84.8	64 - 133
MTBE	1.05	0.841	80.1	56 - 130
Vinyl Acetate	1.06	0.765	72.2	65 - 117
2-Butanone	1.03	0.873	84.8	38 - 157
cis-1,2-Dichloroethene	1.05	0.876	83.4	61 - 129
Ethyl Acetate	1.02	0.888	87.1	54 - 158
Hexane	1.04	0.862	82.9	67 - 121
Chloroform	1.02	0.954	93.5	62 - 141
Tetrahydrofuran	1.06	0.755	71.2	46 - 119
1,2-Dichloroethane	1.05	0.927	88.3	59 - 139
1,1,1-Trichloroethane	1.05	0.819	78.0	53 - 160
Benzene	1.05	0.729	69.4	62 - 123
Carbon Tetrachloride	1.04	0.870	83.7	56 - 159
Cyclohexane	1.05	0.801	76.3	59 - 133
1,2-Dichloropropane	1.05	0.775	73.8	51 - 149
1,4-Dioxane	1.04	0.717	68.9	10 - 170
Trichloroethene	1.04	0.901	86.6	72 - 133
Heptane	1.03	0.780	75.7	35 - 172
cis-1,3-Dichloropropene	1.08	0.822	76.1	66 - 156
Methyl Isobutyl Ketone	1.02	0.707	69.3	10 - 200
trans-1,3-Dichloropropene	1.06	0.765	72.2	52 - 158
1,1,2-Trichloroethane	1.03	0.881	85.5	62 - 143
Toluene	1.05	0.819	78.0	64 - 133
2-Hexanone	1.07	0.700	65.4	10 - 200
Dibromochloromethane	1.06	0.940	88.7	64 - 151
1,2-Dibromoethane	1.04	0.879	84.5	65 - 143
Tetrachloroethene	1.04	0.942	90.6	66 - 138
Chlorobenzene	1.06	0.889	83.9	62 - 134
Ethylbenzene	1.06	0.865	81.6	61 - 139
m&p-Xylene	2.07	1.67	80.7	14 - 175
Bromoform	1.03	0.950	92.2	68 - 142
Styrene	1.05	0.872	83.0	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.800	79.2	43 - 156
o-Xylene	1.06	0.889	83.9	53 - 150
p-Ethyltoluene	1.06	0.922	87.0	59 - 129
1,3,5-Trimethylbenzene	1.06	0.897	84.6	39 - 125
1,2,4-Trimethylbenzene	1.04	0.903	86.8	24 - 131
1,3-Dichlorobenzene	1.03	0.995	96.6	57 - 124
1,4-Dichlorobenzene	1.03	0.995	96.6	56 - 128
1,2-Dichlorobenzene	1.05	0.985	93.8	46 - 117

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Table 2.1 (cont) Results of the LCS Analysis for VOC in Air  
 WA# SERAS-130 Cabo Rojo Site

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Sample ID: LCS 03/06/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.874	84.9	31 - 133
Dichlorodifluoromethane	1.05	0.779	74.2	58 - 140
Chloromethane	1.03	0.800	77.7	52 - 134
Dichlorotetrafluoroethane	1.03	0.876	85.0	54 - 136
Vinyl Chloride	1.03	0.818	79.4	53 - 130
1,3-Butadiene	1.04	0.717	68.9	33 - 130
Bromomethane	1.05	0.895	85.2	41 - 140
Chloroethane	1.05	0.780	74.3	44 - 139
Acetone	0.997	0.744	74.6	35 - 151
Trichlorofluoromethane	1.06	0.907	85.6	50 - 148
Isopropyl Alcohol	1.07	0.533	49.8	19 - 166
1,1-Dichloroethene	1.05	0.822	78.3	49 - 128
Methylene Chloride	1.05	0.800	76.2	35 - 134
Trichlorotrifluoroethane	1.05	1.04	99.0	40 - 160
trans-1,2-Dichloroethene	1.05	0.805	76.7	62 - 123
1,1-Dichloroethane	1.05	0.854	81.3	64 - 133
MTBE	1.05	0.835	79.5	56 - 130
Vinyl Acetate	1.06	0.720	67.9	65 - 117
2-Butanone	1.03	0.844	81.9	38 - 157
cis-1,2-Dichloroethene	1.05	0.839	79.9	61 - 129
Ethyl Acetate	1.02	0.852	83.5	54 - 158
Hexane	1.04	0.834	80.2	67 - 121
Chloroform	1.02	0.903	88.5	62 - 141
Tetrahydrofuran	1.06	0.724	68.3	46 - 119
1,2-Dichloroethane	1.05	0.888	84.6	59 - 139
1,1,1-Trichloroethane	1.05	0.804	76.6	53 - 160
Benzene	1.05	0.720	68.6	62 - 123
Carbon Tetrachloride	1.04	0.838	80.6	56 - 159
Cyclohexane	1.05	0.789	75.1	59 - 133
1,2-Dichloropropane	1.05	0.769	73.2	51 - 149
1,4-Dioxane	1.04	0.710	68.3	10 - 170
Trichloroethene	1.04	0.881	84.7	72 - 133
Heptane	1.03	0.746	72.4	35 - 172
cis-1,3-Dichloropropene	1.08	0.821	76.0	66 - 156
Methyl Isobutyl Ketone	1.02	0.695	68.1	10 - 200
trans-1,3-Dichloropropene	1.06	0.759	71.6	52 - 158
1,1,2-Trichloroethane	1.03	0.836	81.2	62 - 143
Toluene	1.05	0.803	76.5	64 - 133
2-Hexanone	1.07	0.672	62.8	10 - 200
Dibromochloromethane	1.06	0.898	84.7	64 - 151
1,2-Dibromoethane	1.04	0.844	81.2	65 - 143
Tetrachloroethene	1.04	0.899	86.4	66 - 138
Chlorobenzene	1.06	0.840	79.2	62 - 134
Ethylbenzene	1.06	0.838	79.1	61 - 139
m&p-Xylene	2.07	1.59	76.8	14 - 175
Bromoform	1.03	0.911	88.4	68 - 142
Styrene	1.05	0.836	79.6	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.759	75.1	43 - 156
o-Xylene	1.06	0.844	79.6	53 - 150
p-Ethyltoluene	1.06	0.878	82.8	59 - 129
1,3,5-Trimethylbenzene	1.06	0.842	79.4	39 - 125
1,2,4-Trimethylbenzene	1.04	0.861	82.8	24 - 131
1,3-Dichlorobenzene	1.03	0.938	91.1	57 - 124
1,4-Dichlorobenzene	1.03	0.931	90.4	56 - 128
1,2-Dichlorobenzene	1.05	0.920	87.6	46 - 117

#### REPORT OF LABORATORY ANALYSIS

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Table 2.2 Results of the Duplicate Analysis for VOC in Air  
 WA# SERAS-130 Cabo Rojo Site

Page 1 of 3

Sample ID: 0-130-1004

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	0.388	0.421	8	≤25

Sample ID: 0-130-1044

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

Sample ID: 0-130-1001

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	0.294	0.323	9	≤25
Tetrachloroethene	48.9	53.9	10	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air  
 WA# SERAS-130 Cabo Rojo Site

Page 2 of 3

Sample ID: 0-130-1012

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.338	0.358	6	≤25
Chloromethane	0.145	0.150	3	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	2.60	2.83	8	≤25
Trichlorofluoromethane	0.204	0.220	8	≤25
Isopropyl Alcohol	0.760	0.886	20	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.190	0.192	1	≤25
Trichlorotrifluoroethane	0.0759	0.0754	0.7	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	0.814	0.861	6	≤25
cis-1,2-Dichloroethene	0.0757	0.0751	0.8	≤25
Ethyl Acetate	0.430	0.475	10	≤25
Hexane	0.0919	0.0998	8	≤25
Chloroform	0.446	0.474	6	≤25
Tetrahydrofuran	0.113	0.120	6	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	0.0930	0.0960	3	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	19.5	20.5	5	≤25
Heptane	U	U	NC	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	0.336	0.358	6	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	0.858	0.786	9	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	1080	1070	0.9	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	U	U	NC	≤25
m&p-Xylene	U	U	NC	≤25
Bromoform	U	U	NC	≤25
Styrene	U	U	NC	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	U	U	NC	≤25
p-Ethyltoluene	U	U	NC	≤25
1,3,5-Trimethylbenzene	U	U	NC	≤25
1,2,4-Trimethylbenzene	U	U	NC	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

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Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air  
 WA# SERAS-130 Cabo Rojo Site

Page 3 of 3

Sample ID: 0-130-1039

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.358	0.365	2	≤25
Chloromethane	0.673	0.668	0.7	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	461	445	4	≤25
Trichlorofluoromethane	0.208	0.205	1	≤25
Isopropyl Alcohol	5.94	5.58	6	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	4.85	4.93	2	≤25
Trichlorotrifluoroethane	0.0791	0.0796	0.6	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	15.6	15.9	2	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	5.19	5.19	0	≤25
Hexane	9.05	9.18	1	≤25
Chloroform	1.80	1.79	0.6	≤25
Tetrahydrofuran	1.90	1.82	4	≤25
1,2-Dichloroethane	0.257	0.269	5	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	4.69	4.81	3	≤25
Carbon Tetrachloride	0.147	0.148	0.7	≤25
Cyclohexane	1.91	1.98	4	≤25
1,2-Dichloropropane	0.229	0.220	4	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	4.31	4.48	4	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	U	U	NC	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	34700	34800	0.3	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	4.92	5.08	3	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	12.5	13.1	5	≤25
m&p-Xylene	30.6	32.5	6	≤25
Bromoform	U	U	NC	≤25
Styrene	0.589	0.627	6	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	6.89	7.23	5	≤25
p-Ethyltoluene	2.44	2.53	4	≤25
1,3,5-Trimethylbenzene	1.79	1.88	5	≤25
1,2,4-Trimethylbenzene	5.65	5.94	5	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	0.257	0.265	3	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

#### REPORT OF LABORATORY ANALYSIS

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USEPA

DateShipped: 3/2/2012

CarrierName: FedEx

AirbillNo: 899458692192

WO# R203001

## CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0009

Cooler #: 4

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop_Date	Stop_Time
24	0-130-1004	S2A-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	226	14028	-30	3/1/2012	6:28:00 AM
25	0-130-1005	S2A-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	128	13933	-30	3/1/2012	6:35:00 AM
26	0-130-1044	DEC-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	97	14010	-30	3/1/2012	10:36:00 AM
27	0-130-1045	DEC-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	129	13794	-30	3/1/2012	10:44:00 AM
28	0-130-1046	DEC-AMB1	TO-15 (Chlorinated)	Air	1	SUMMA	149	13958	-30	3/1/2012	11:00:00 AM
29	0-130-1049	DEC-IA3	TO-15 (Chlorinated)	Air	1	SUMMA	215	14023	-30	3/1/2012	10:53:00 AM
30	0-130-1050	CRPDC-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	10	13762	-30	3/1/2012	11:20:00 AM
31	0-130-1054	CRPDC-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	47	14000	-30	3/1/2012	11:23:00 AM

Special Instructions: Analyze per PWA. Chlorinated VOC list.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	<i>M. Cartwright</i>	3/2/12	FED-EX	3/2/12							
—	— FEDEX —	—	—	3/5/12	11:30						
All/Analysis	<i>M. Cartwright</i>	3/5/12	<i>T. P.</i>	3/5/12	1630						

Page 1 of 1

USEPA

DateShipped: 3/2/2012

CarrierName: FedEx

AirbillNo: 899458692192

W0#R203001

## CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0010

Cooler #: 5

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
32	0-130-1012	EQP-SS1	TO-15 (Full List)	Soil Gas	1	SUMMA	63	13991	-30	3/1/2012	7:40:00 AM
33	0-130-1013	EQP-SS2	TO-15 (Full List)	Soil Gas	1	SUMMA	228	13789	-30	3/1/2012	7:38:00 AM
34	0-130-1018	EQP-SS3	TO-15 (Full List)	Soil Gas	1	SUMMA	3	14015	-30	3/1/2012	7:36:00 AM
35	0-130-1019	EQP-SS4	TO-15 (Full List)	Soil Gas	1	SUMMA	220	13998	-30	3/1/2012	7:30:00 AM
36	0-130-1020	EQP-SS5	TO-15 (Full List)	Soil Gas	1	SUMMA	14073	13778	-30	3/1/2012	7:28:00 AM
37	0-130-1021	EQP-SS6	TO-15 (Full List)	Soil Gas	1	SUMMA	182	13988	-30	3/1/2012	7:32:00 AM
38	0-130-1022	EQP-SS7	TO-15 (Full List)	Soil Gas	1	SUMMA	266	13990	-30	3/1/2012	7:34:00 AM
39	0-130-1055	CRPDC-AMB1	TO-15 (Chlorinated)	Air	1	SUMMA	74	14029	-30	3/1/2012	11:24:00 AM

Special Instructions: Analyze per PWA. Sample 0-130-1055 gets Chlorinated list only, the remaining samples get Full TO-15 list.

## SAMPLES TRANSFERRED FROM

\*Sub-slab sample previously collected at Location EQP-SS1 (sample 0-130-1012) indicated concentrations of 4,970 ppbv for PCE, 83 ppbv for TCE and 50 ppbv for DCE. Similar concentrations may be detected at this location and in other soil gas samples collected at locations EQP-SS2 through 7.

## CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	<u>M. Cartwright</u>	3/2/12	FED-EX	3/2/12							
FED-EX											
All/Analysis	<u>M. Cartwright</u>	3/5/12	<u>R. S.</u>	3/5/12	16:30						

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DateShipped: 3/2/2012

CarrierName: FedEx

Airbill No: 899458692192

~~9458692182~~ W0# R203001

## **CHAIN OF CUSTODY RECORD**

No: 0-130-3/2/12-0011

Cooler #: 6

## Lab: SERAS

## Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
40	0-130-1001	S2A-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	14066	13964	-30	3/1/2012	6:28:00 AM
41	0-130-1002	S2A-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	41	13923	-30	3/1/2012	6:29:00 AM
42	0-130-1006	S2B-SS1	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	143	13776	-30	3/1/2012	6:42:00 AM
43	0-130-1007	S2B-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	195	14042	-30	3/1/2012	6:43:00 AM
44	0-130-1008	S2B-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	227	14043	-30	3/1/2012	6:44:00 AM
45	0-130-1033	EQP-SS8	TO-15 (Full List)	Soil Gas	1	SUMMA	144	14036	-30	3/1/2012	9:30:00 AM
46	0-130-1037	EQP-SS9	TO-15 (Full List)	Soil Gas	1	SUMMA	222	13906	-30	3/1/2012	9:32:00 AM
47	0-130-1039	EQP-SS10	TO-15 (Full List)	Soil Gas	1	SUMMA	236	13944	-30	3/1/2012	10:18:00 AM

Special Instructions: Analyze per PWA. Samples 0-130-1001, 1002, 1006, 1007 and 1008 get Chlorinated VOC list. Samples 0-130-1033, 1037 and 1039 get Full TO-15 list.

\*Sub-slab sample previously collected near Location EQP-SS8 (sample 0-130-1033) indicated concentrations of 980 ppbv for PCE, 190 ppbv for TCE and 1,700 ppbv for DCE. Similar concentrations may be detected at this location and other soil gas samples collected at location EQP.

\*Soil gas samples previously collected near Location S2A and S2B indicated concentrations ranging from 20 to 2,500 ppbv for PCE and 91 to 120 ppbv for TCE. Similar concentrations may be detected in soil gas samples collected at locations S2A and S2B.

#### SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All /Analysis	Mahal	3/2/12	FED-EX	3/2/12	-	→	FED EX	—	De Shaw	3/5/12	11:30
All /Analysis	De Shaw	3/5/12	Parikh	3/5/12	1630						

023

USEPA

DateShipped: 3/2/2012

CarrierName: FedEx

AirbillNo: 899458692192

o: 899458692192  
W# R203001

## CHAIN OF CUSTODY RECORD

## Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0012

Cooler #: 7

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
48	0-130-1003	S2A-SS4	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	14074	14011	-30	3/1/2012	6:30:00 AM
49	0-130-1041	DEC-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	70	13946	-30	3/1/2012	10:40:00 AM
50	0-130-1042	DEC-SS4	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	76	13911	-30	3/1/2012	10:42:00 AM
51	0-130-1043	DEC-SS5	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	166	13912	-30	3/1/2012	10:36:00 AM
52	0-130-1047	DEC-SS1	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	19	13795	-30	3/1/2012	10:50:00 AM
53	0-130-1048	DEC-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	24	14008	-30	3/1/2012	10:52:00 AM
54	0-130-1051	CRPDC-SS3	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	160	13929	-30	3/1/2012	11:20:00 AM
55	0-130-1052	CRPDC-SS1	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	112	14047	-30	3/1/2012	11:21:00 AM

Special Instructions: Analyze per PWA. Chlorinated VOC list.

\*Soil gas samples previously collected near Location S2A indicated concentrations ranging from 20 to 2,500 ppbv for PCE and 91 to 120 ppbv for TCE. Similar concentrations may be detected in soil gas samples collected at location S2A.

\*Soil gas samples previously collected at Locations DEC-SS1 and SS-5 (Samples 0-130-1047 and 1043) were non-detect for PCE, TCE and DEC however soil gas samples collected around the DEC building indicated concentrations of 430 ppbv for PCE and TCE, 850 to 50,200 ppbv for DCE. Similar concentrations may be detected in soil gas samples collected at location DEC.

\*Soil gas samples previously collected at Location CRPDC-SS1 (Sample 0-130-1052) indicated concentrations of 64,700 ppbv for PCE and 58 ppbv for TCE. Similar concentrations may be detected at this location and in other soil gas samples collected at location CRPDC.

## SAMPLES TRANSFERRED FROM

**CHAIN OF CUSTODY #**

024

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
A4/Analyses	Unlabeled	3/2/12	FED-EX	3/2/12	—	—	FED EX	—	Unlabeled	3/5/12	11:30
All/Analysis	Unlabeled	3/5/12	Bob	3/5/12	1630						

USEPA

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DateShipped: 3/2/2012

CarrierName: FedEx

Airbill No: 899458692192

1059 #

99458692192  
WO# R203001

## **CHAIN OF CUSTODY RECORD**

## Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 0-130-3/2/12-0013

Cooler #: 8

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
56	0-130-1053	CRPDC-SS2	TO-15 (Chlorinated)	Soil Gas	1	SUMMA	119	13989	-30	3/1/2012	11:22:00 AM
57	0-130-1057	Trip Blank	TO-15 (Full List)	Air	1	SUMMA	219		-30	3/2/2012	12:00:00 PM

Special Instructions: Analyze per PWA. Sample 0-130-1053 analyzed for chlorinated VOC list only. Trip blank gets full TO-15 analysis.

**SAMPLES TRANSFERRED FROM**

\*Soil gas samples previously collected at Location CRPDC-SS2 (Sample 0-130-1053) indicated concentrations of 4,870 ppbv for PCE and 32 ppbv for TCE. Similar concentrations may be detected at this location.

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All / Analysis	Melinda	3/2/12	FED-EX	3/2/12	-	-	FED-EX	3/5/12	Jeanne	3/5/12	11:30
All / Analysis	Jeanne	3/5/12	B&B	3/5/12	1630						

025